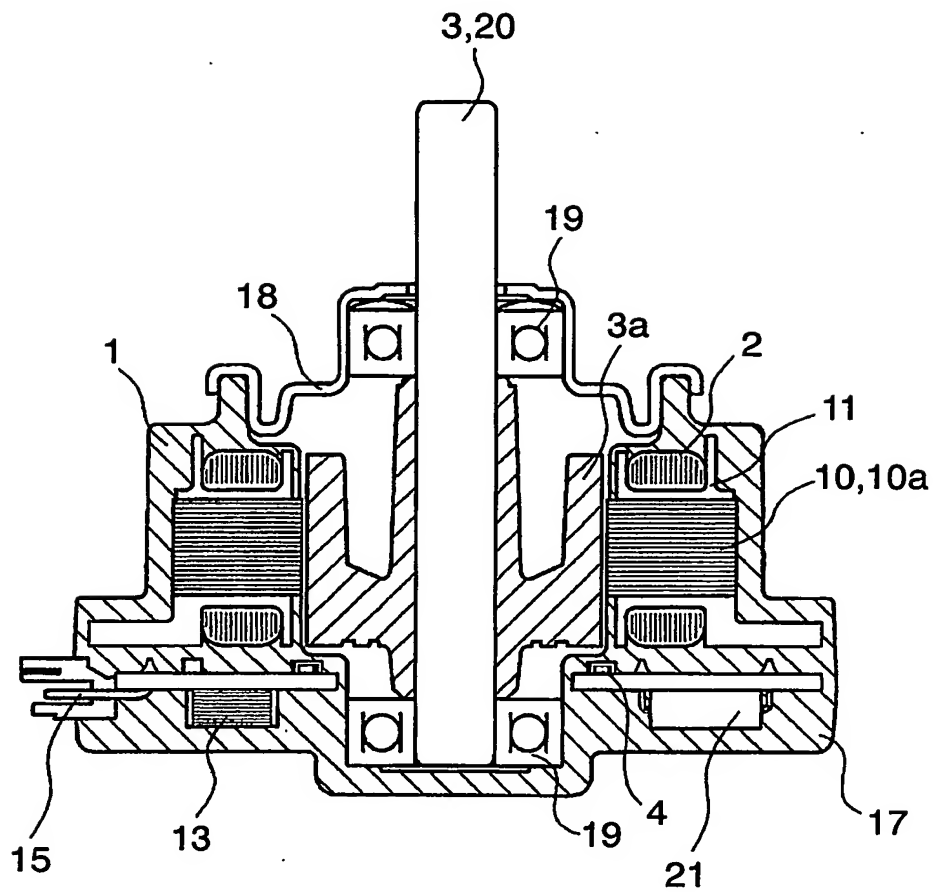


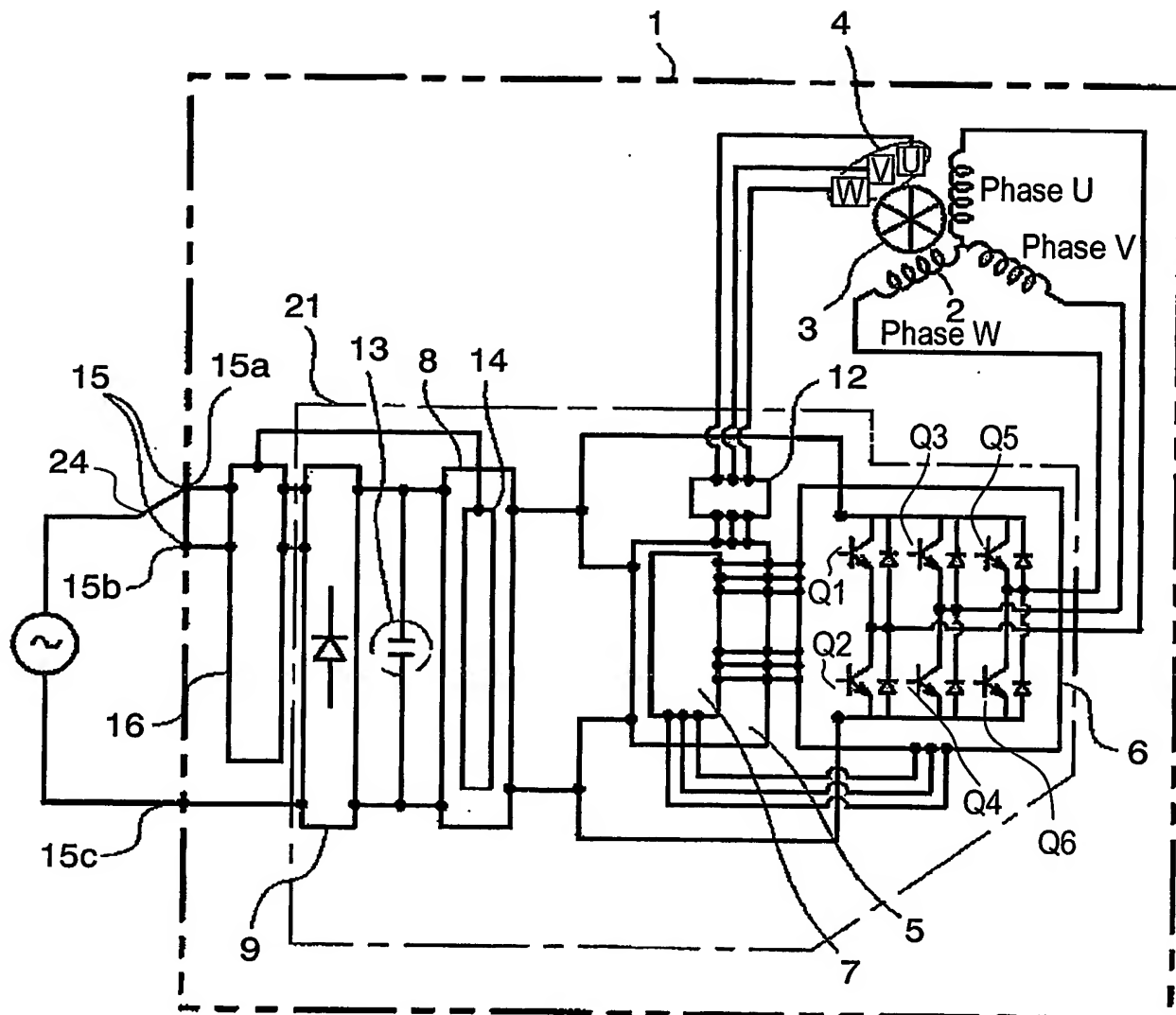
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FIG. 1



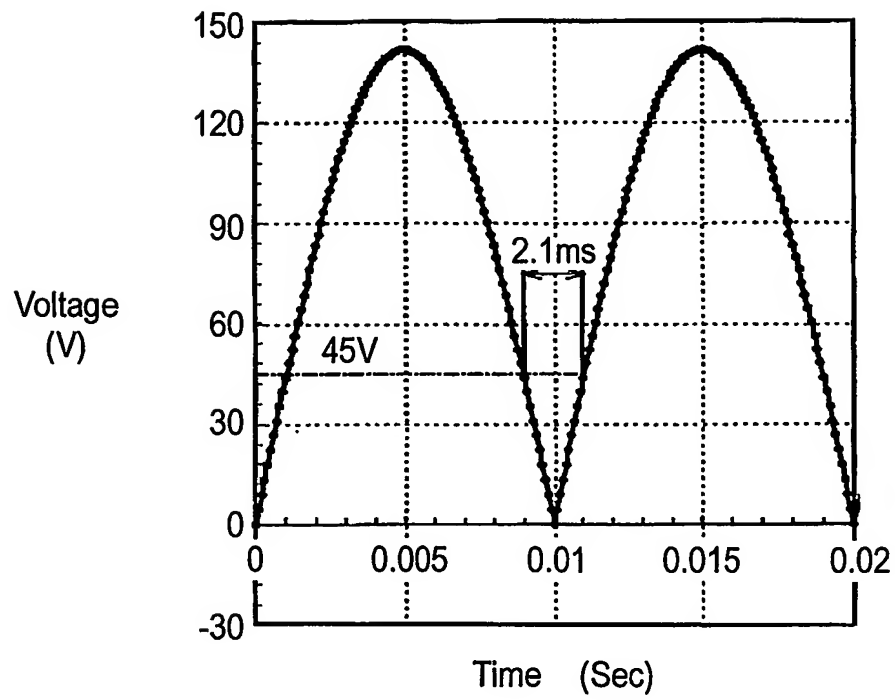
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FIG. 2



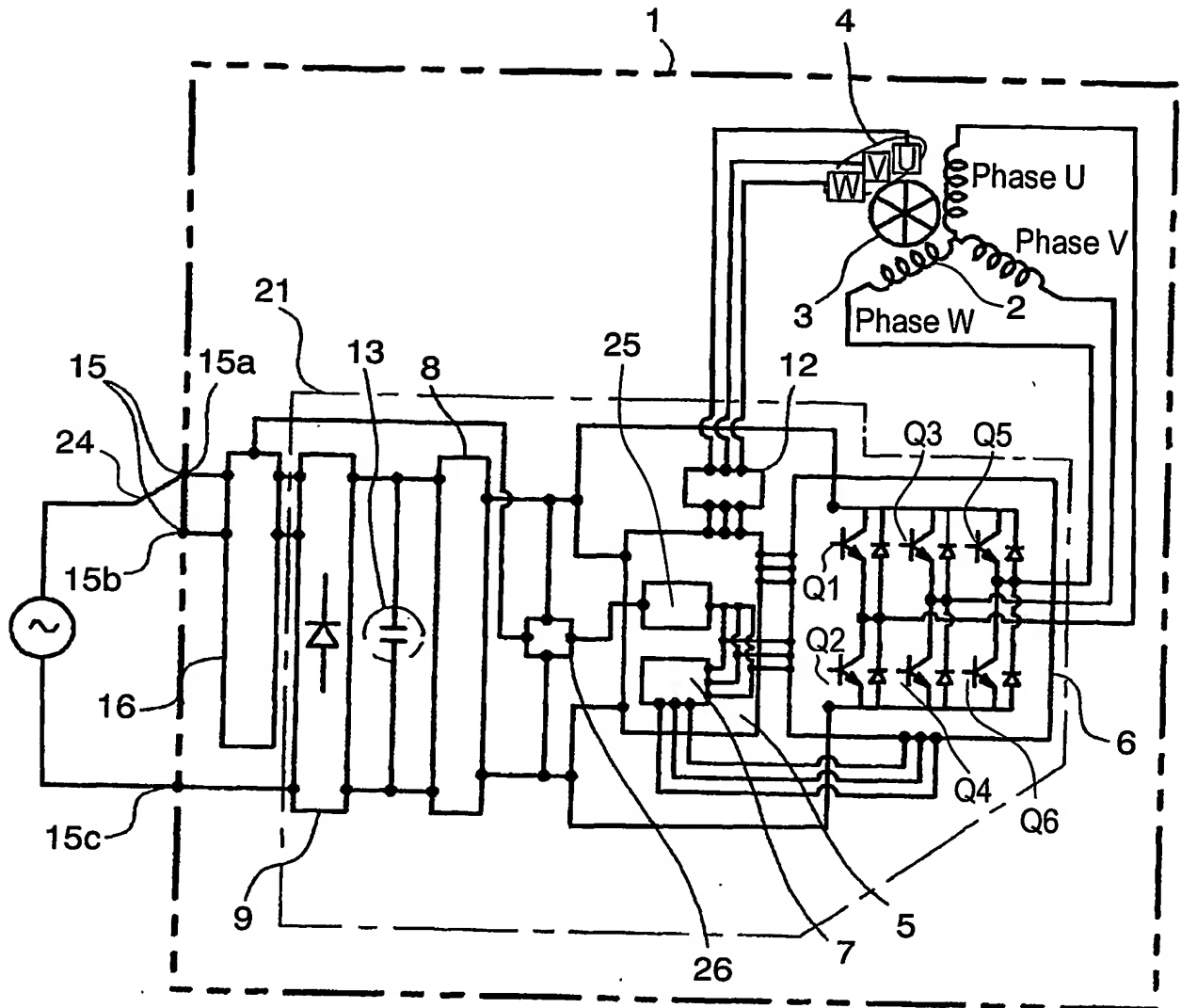
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FIG. 3



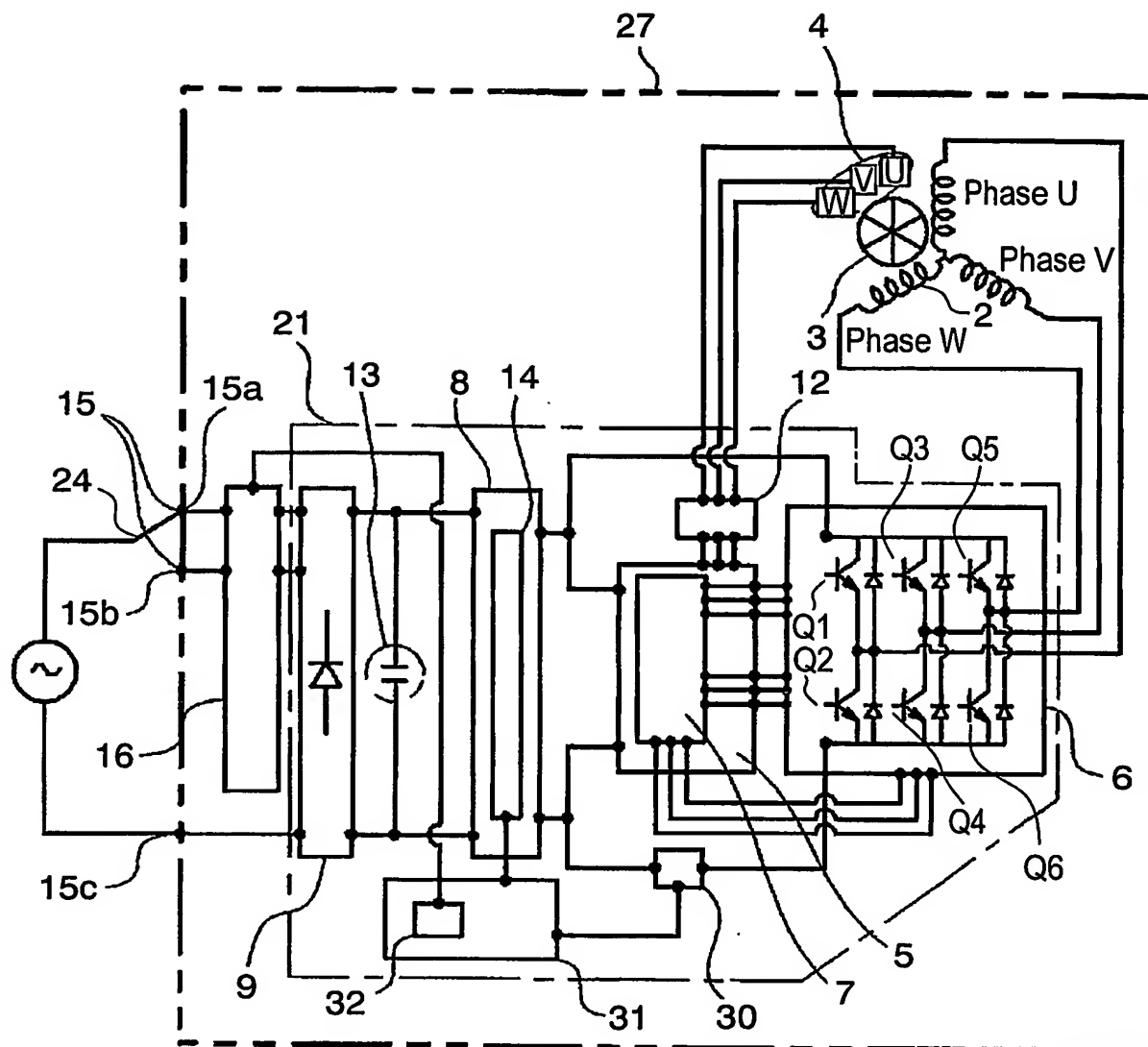
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FIG. 4



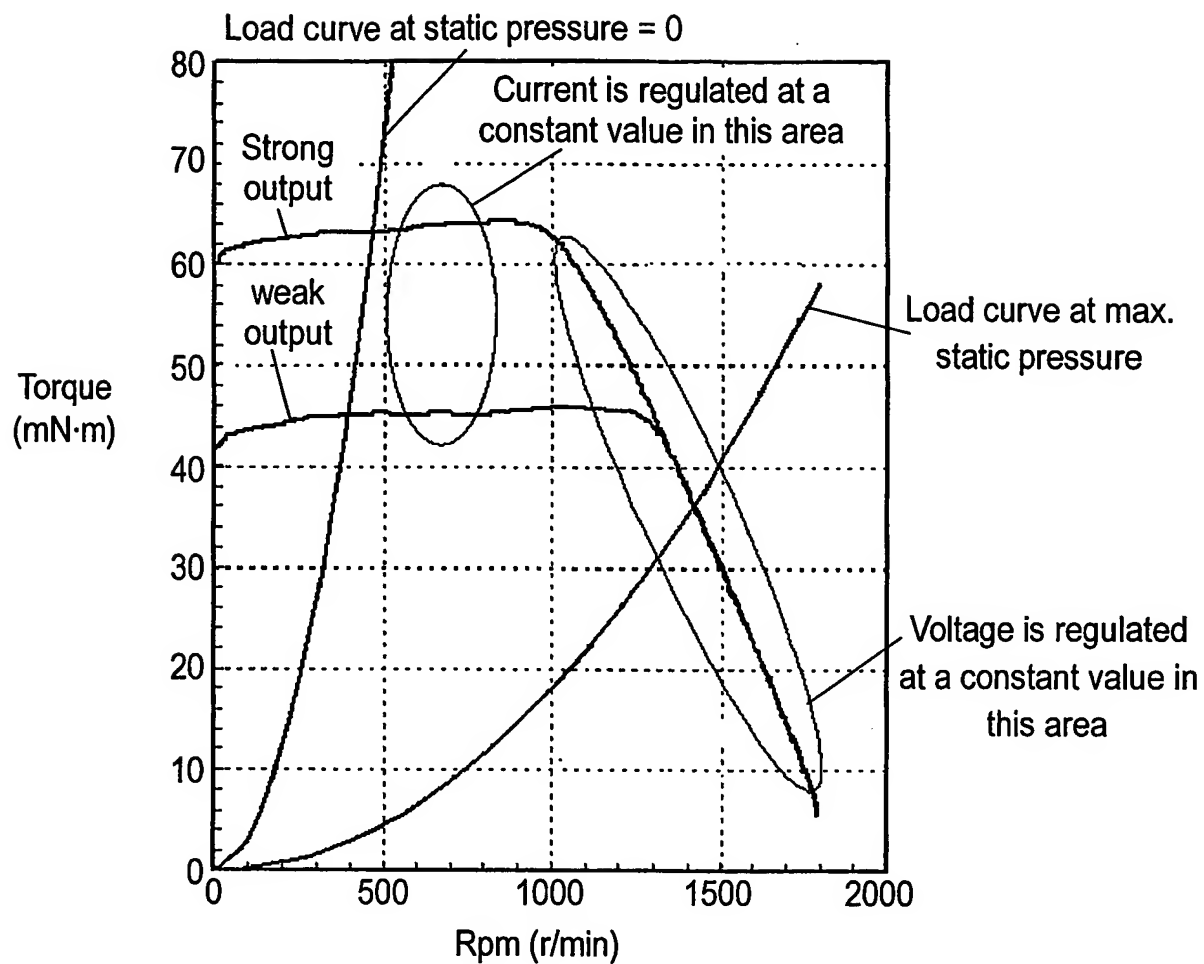
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FIG. 5



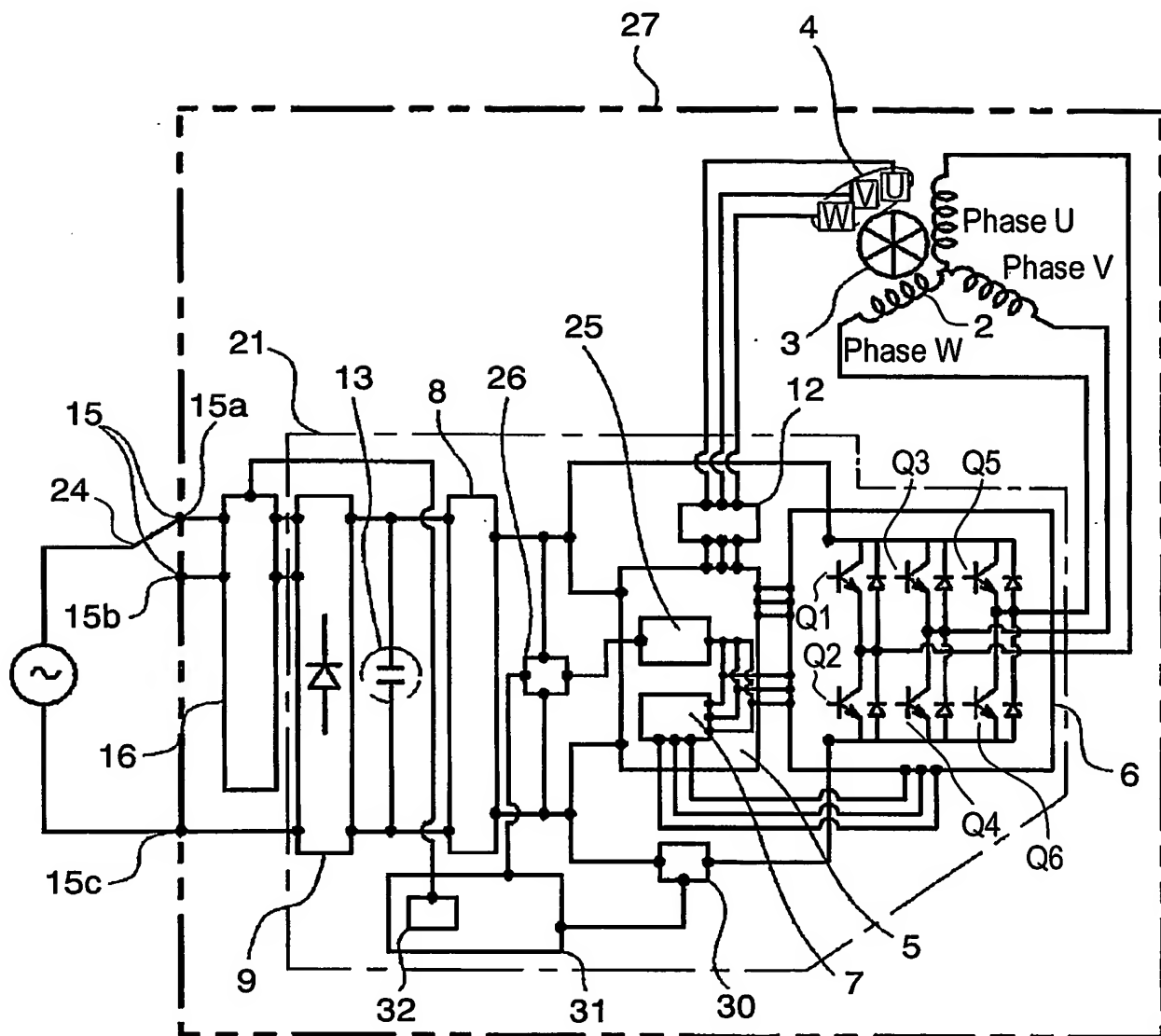
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FIG. 6



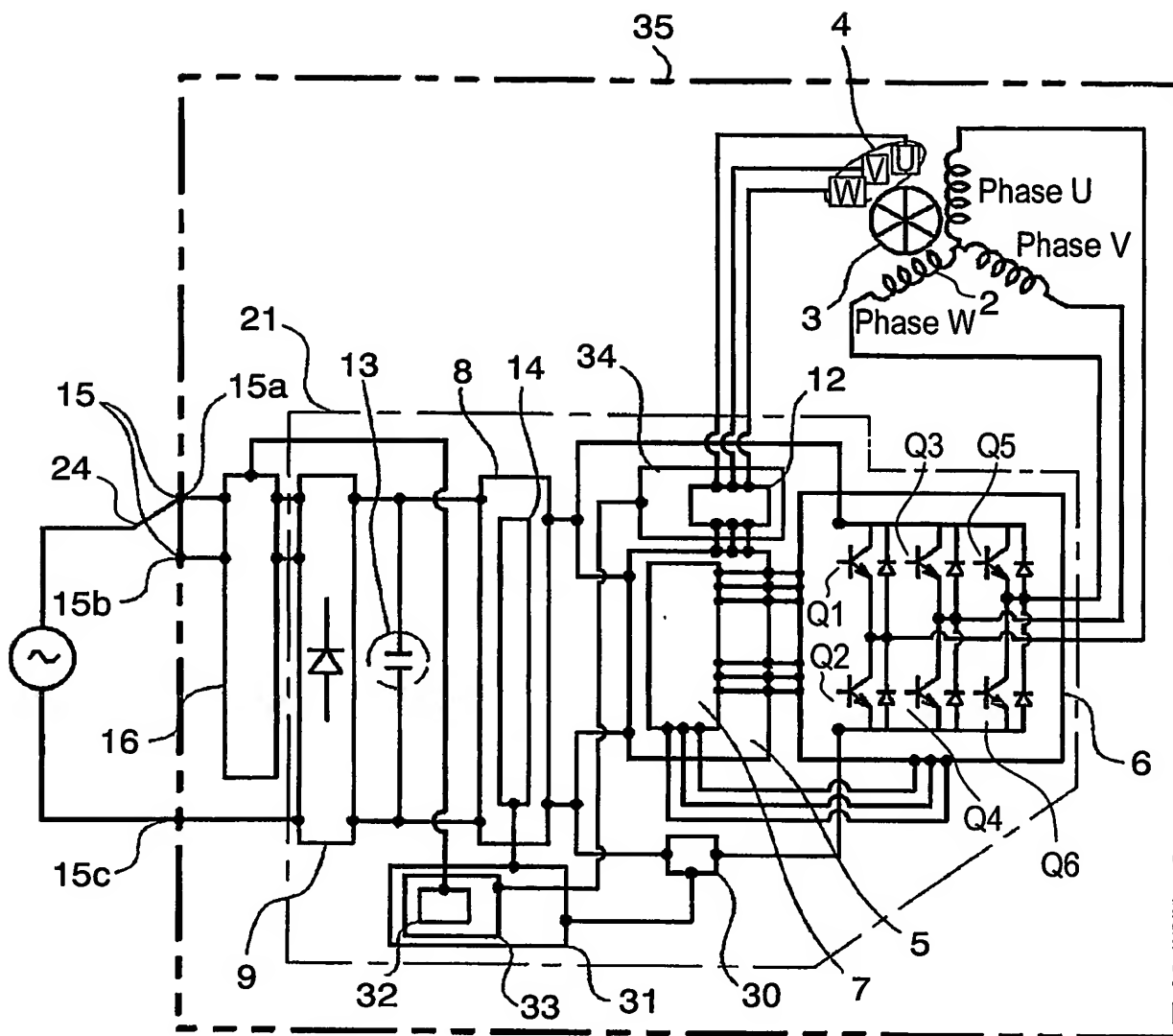
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FIG. 7



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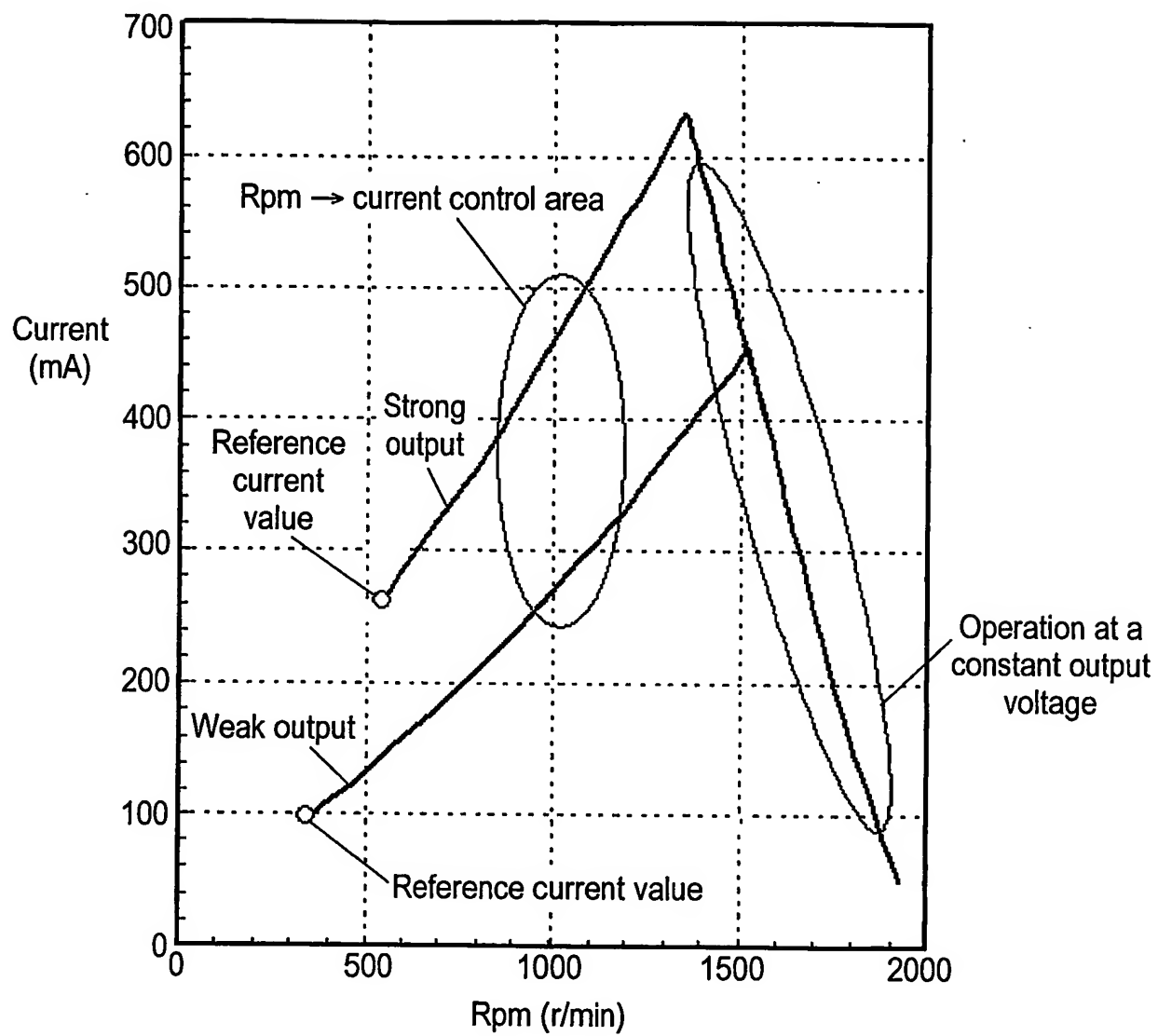
FIG. 8





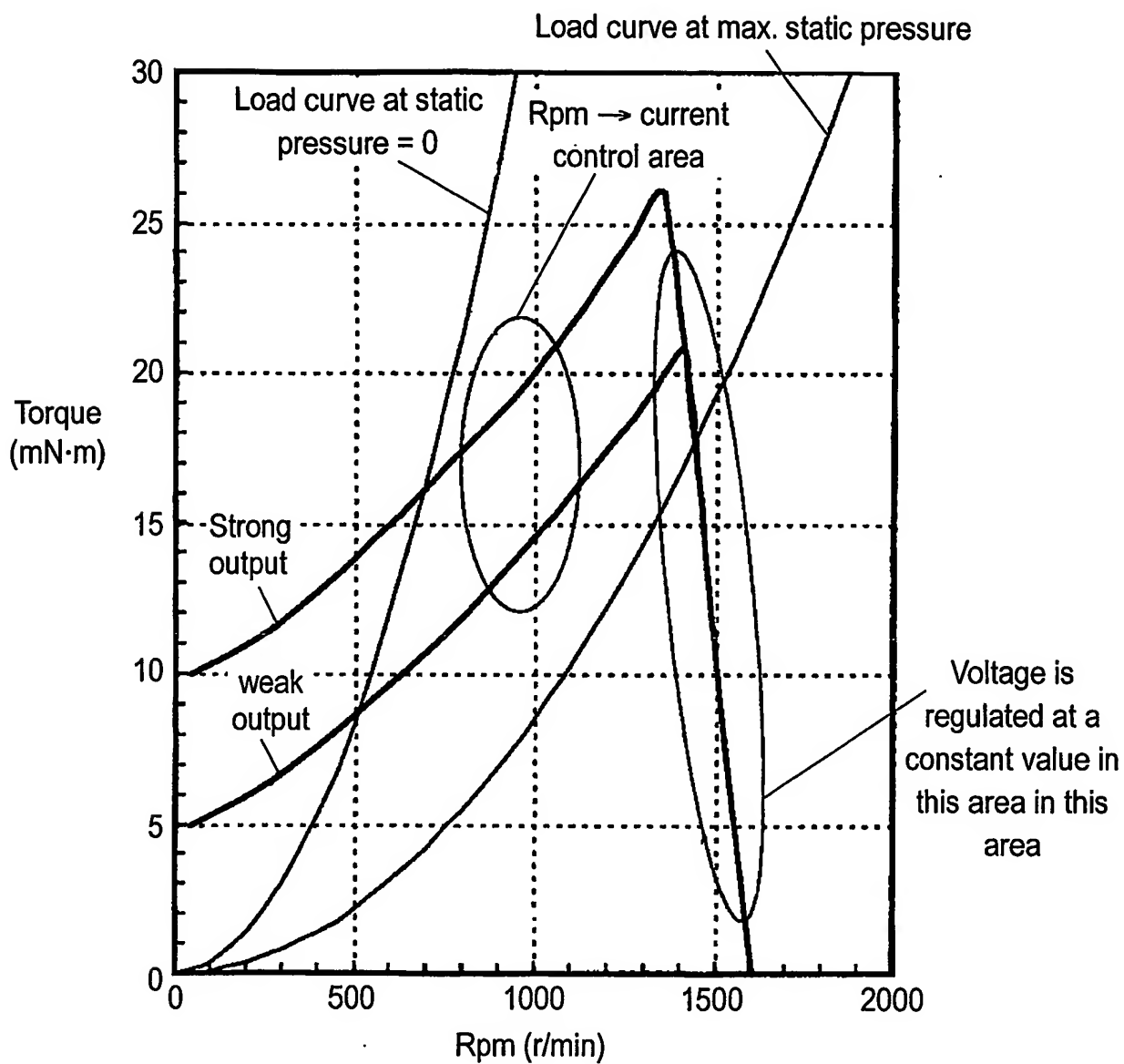
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FIG. 9



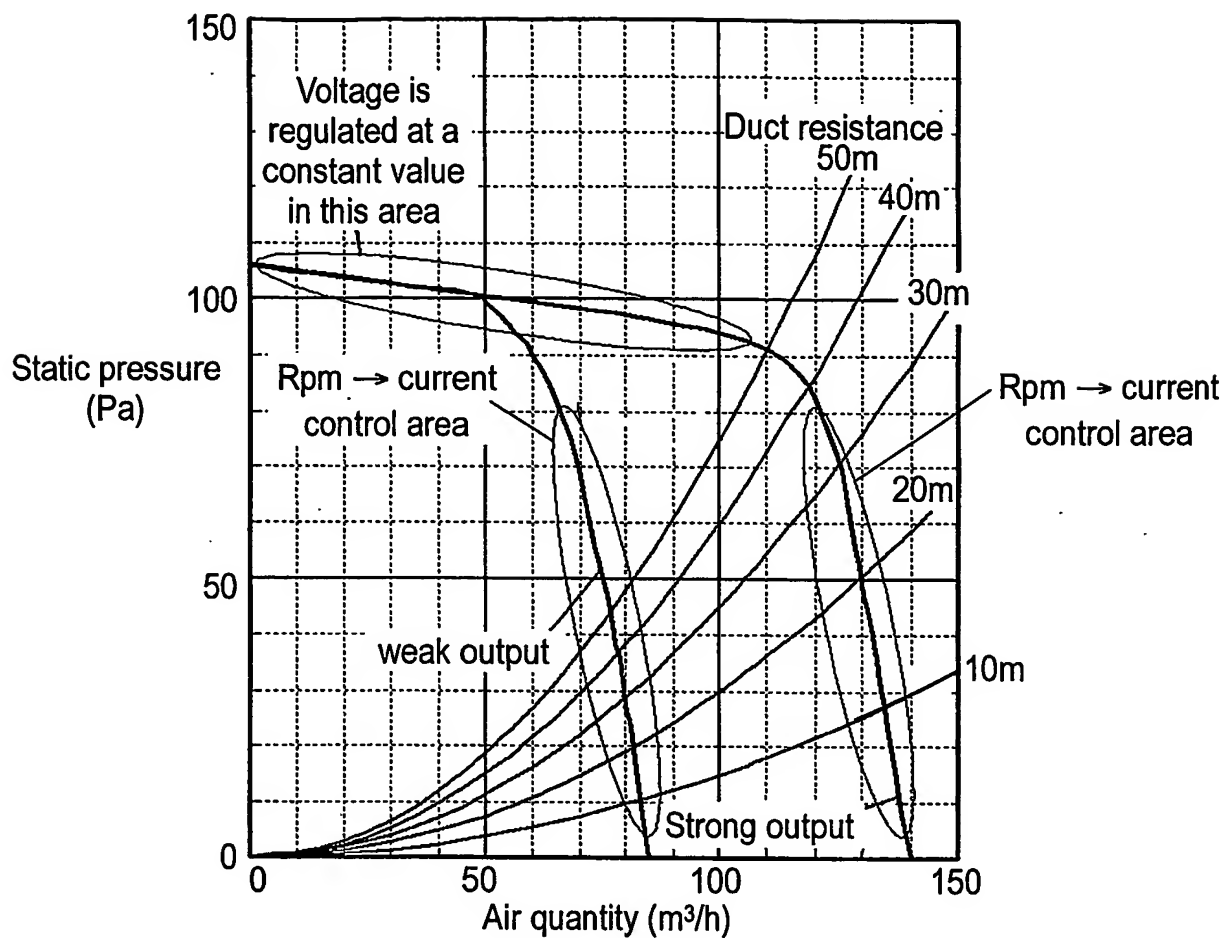
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FIG. 10



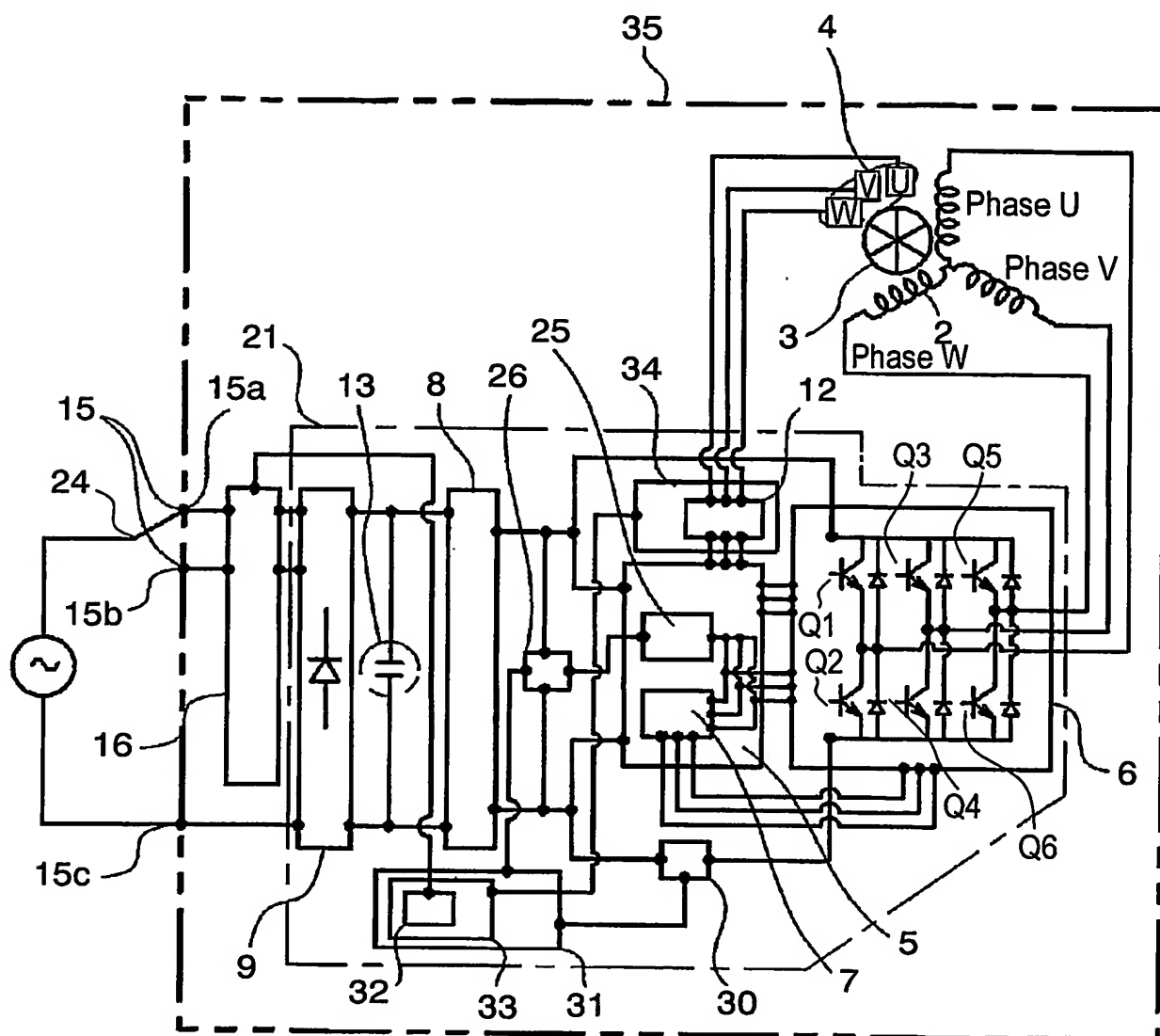
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FIG. 11



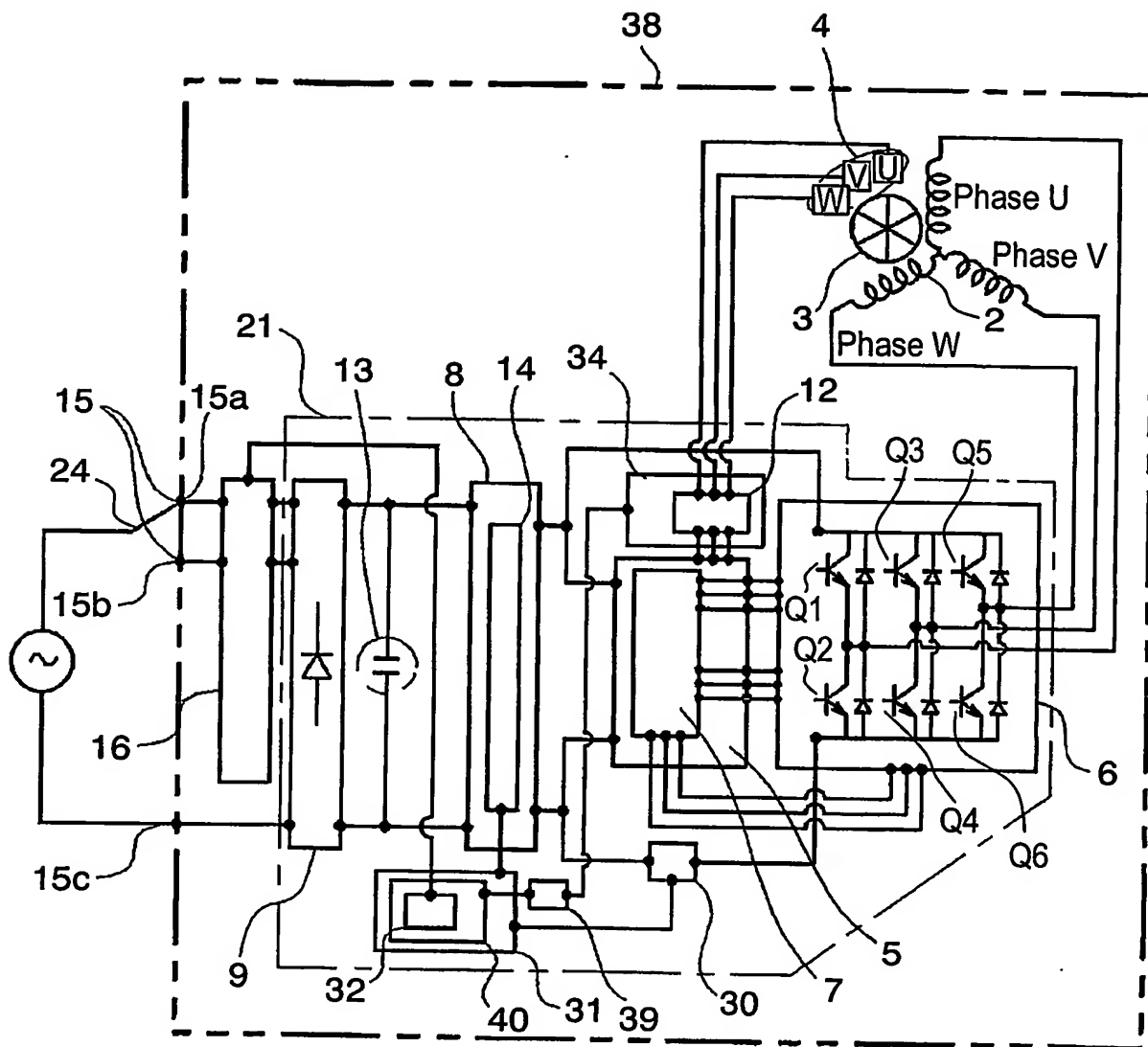
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FIG. 12



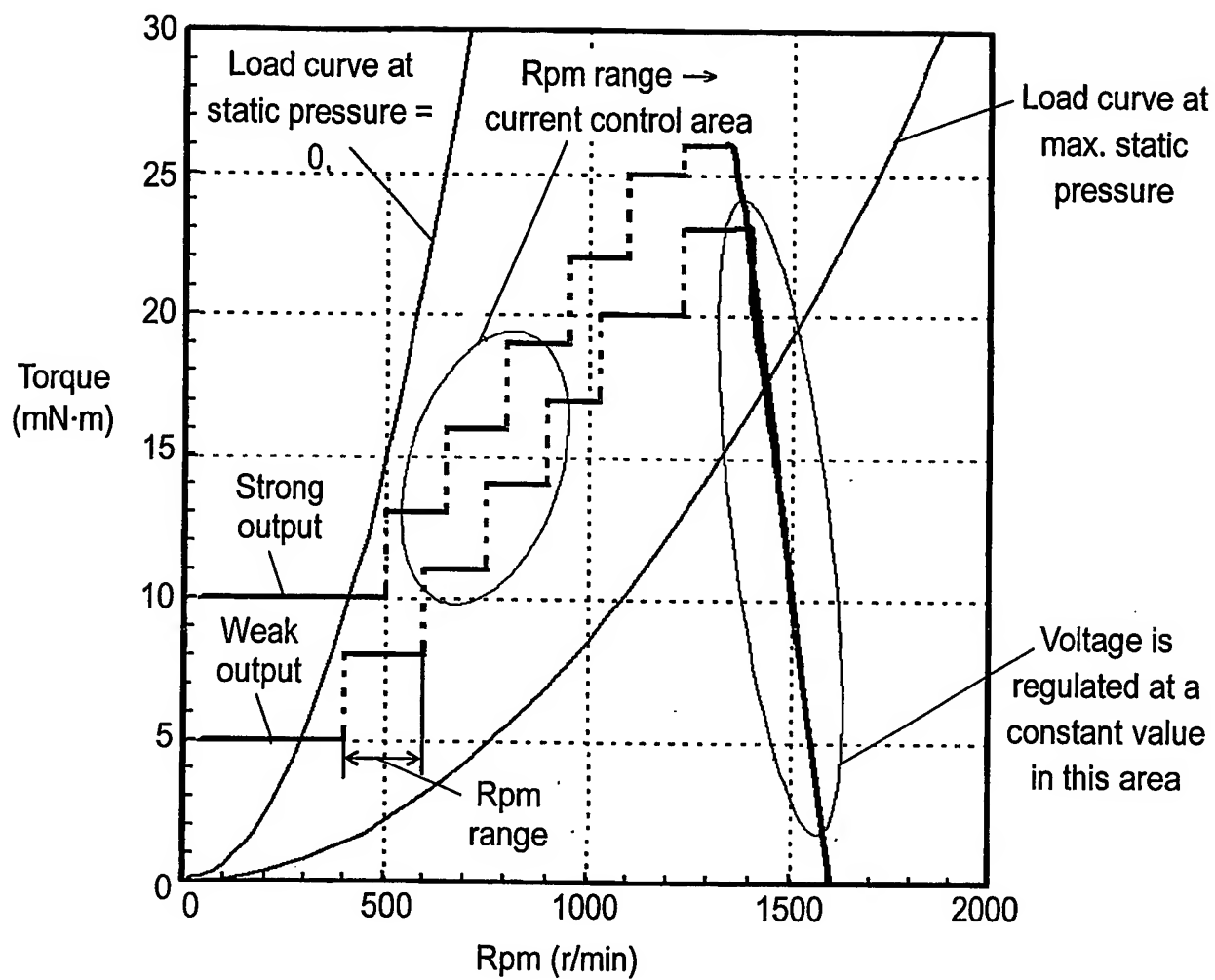
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FIG. 13



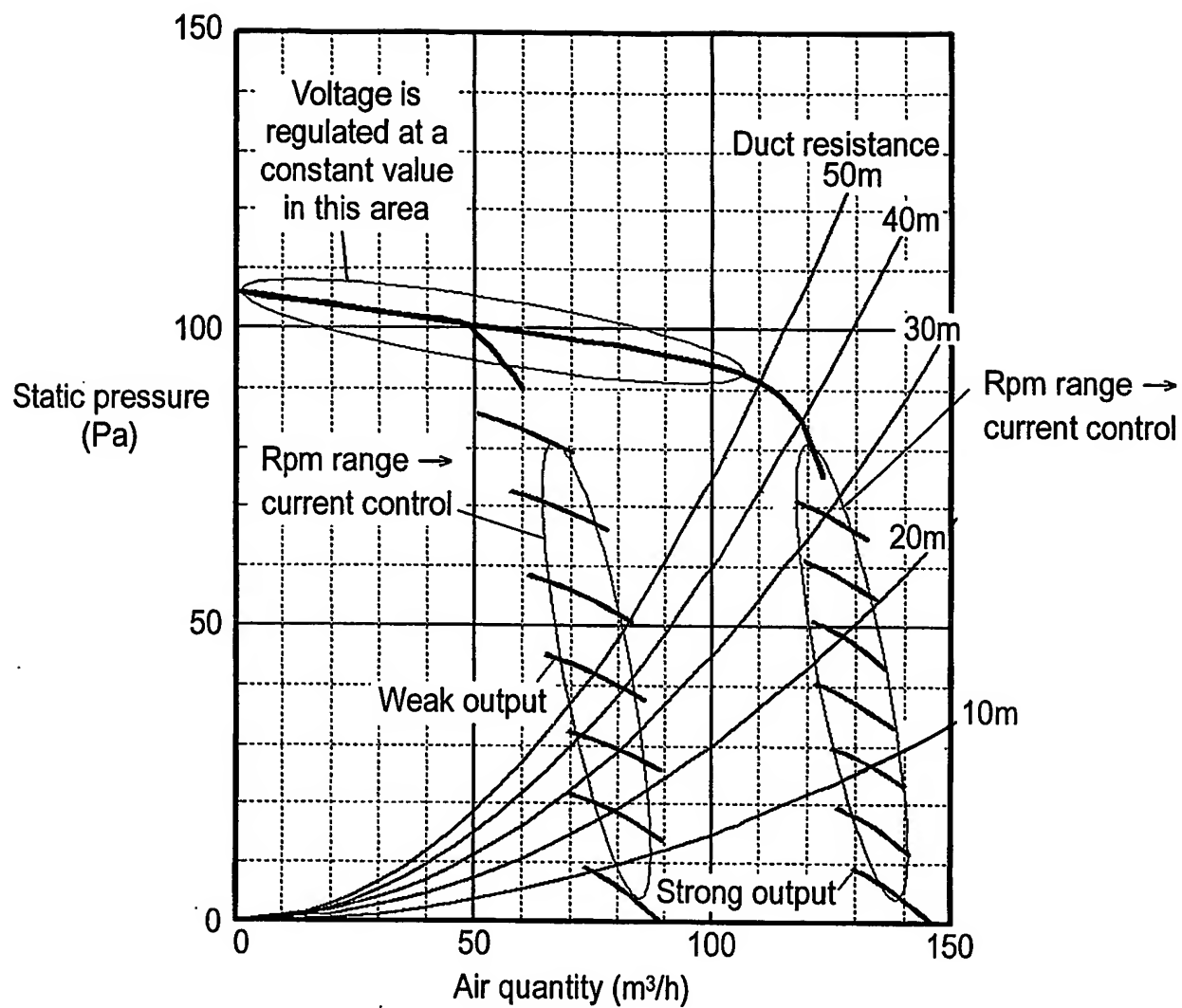
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FIG. 14



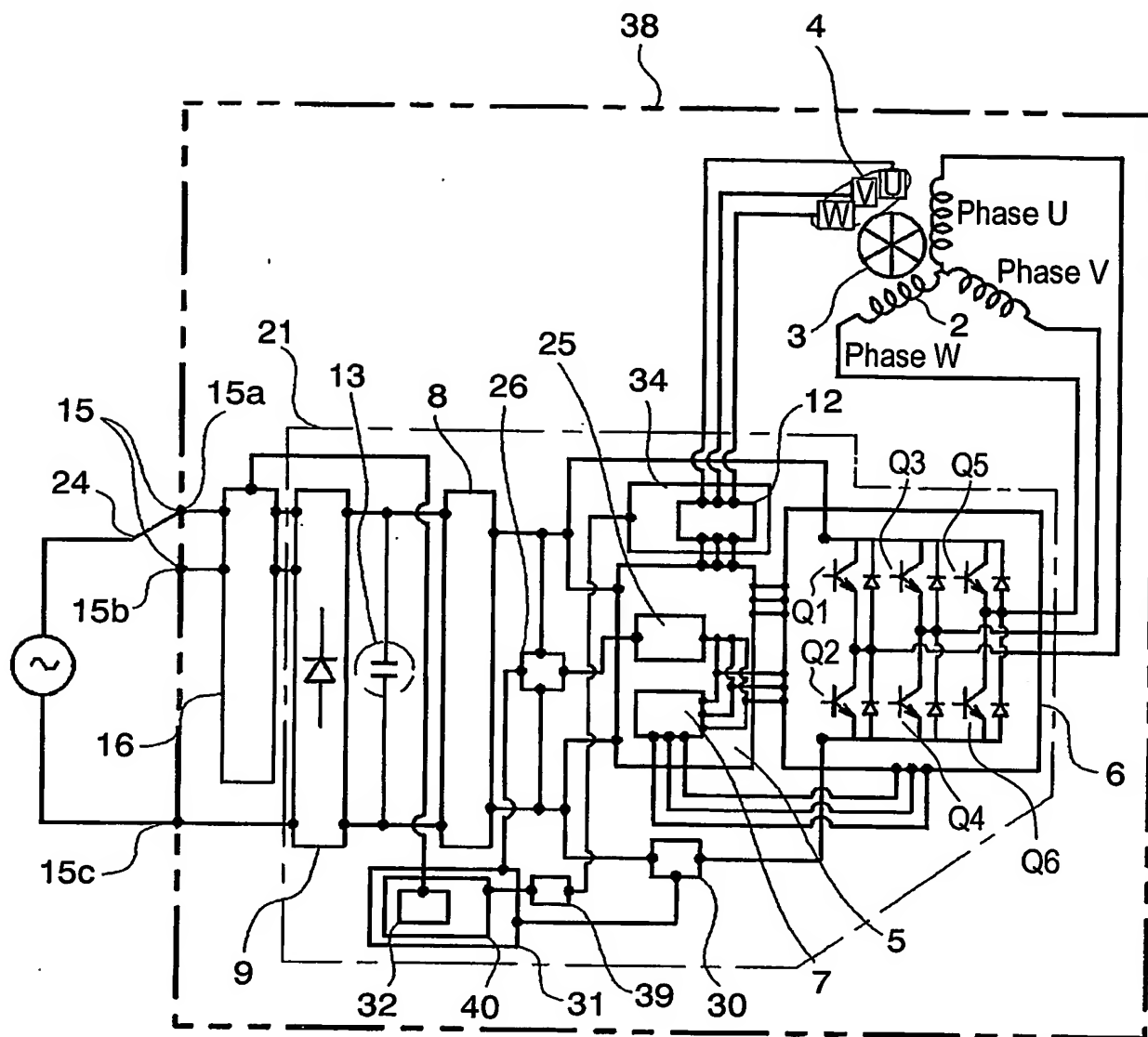
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FIG. 15



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FIG. 16

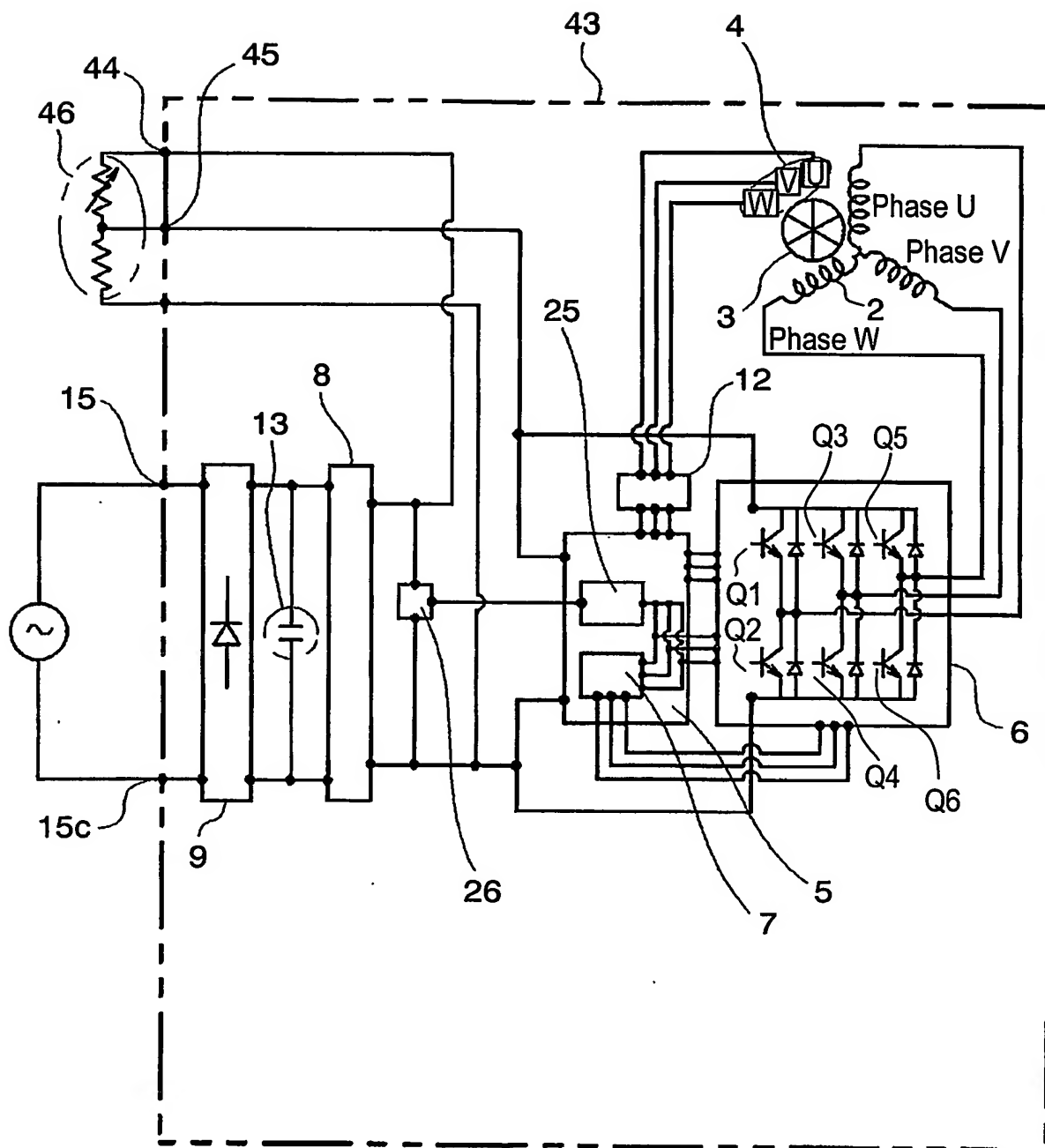






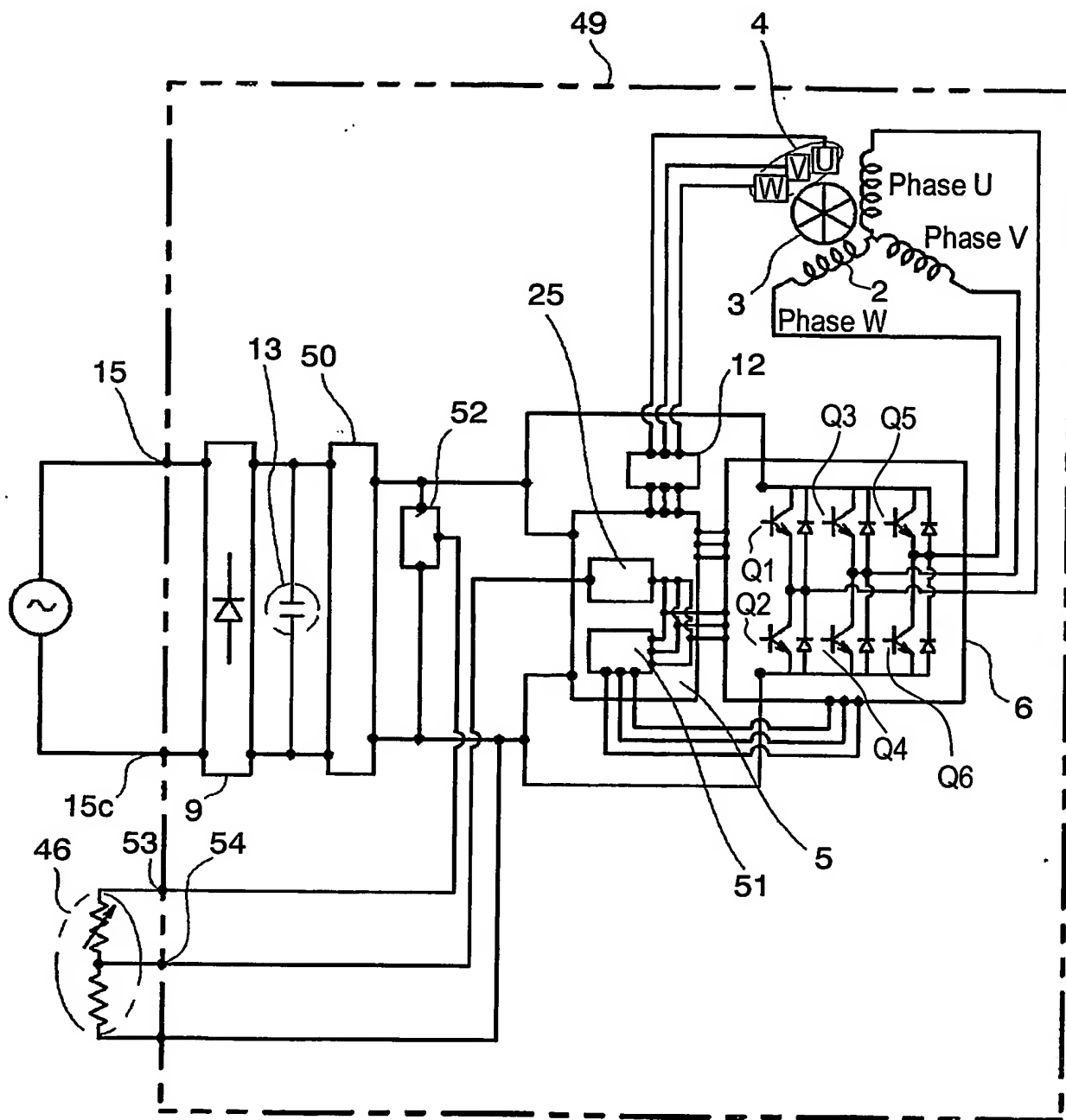
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FIG. 18



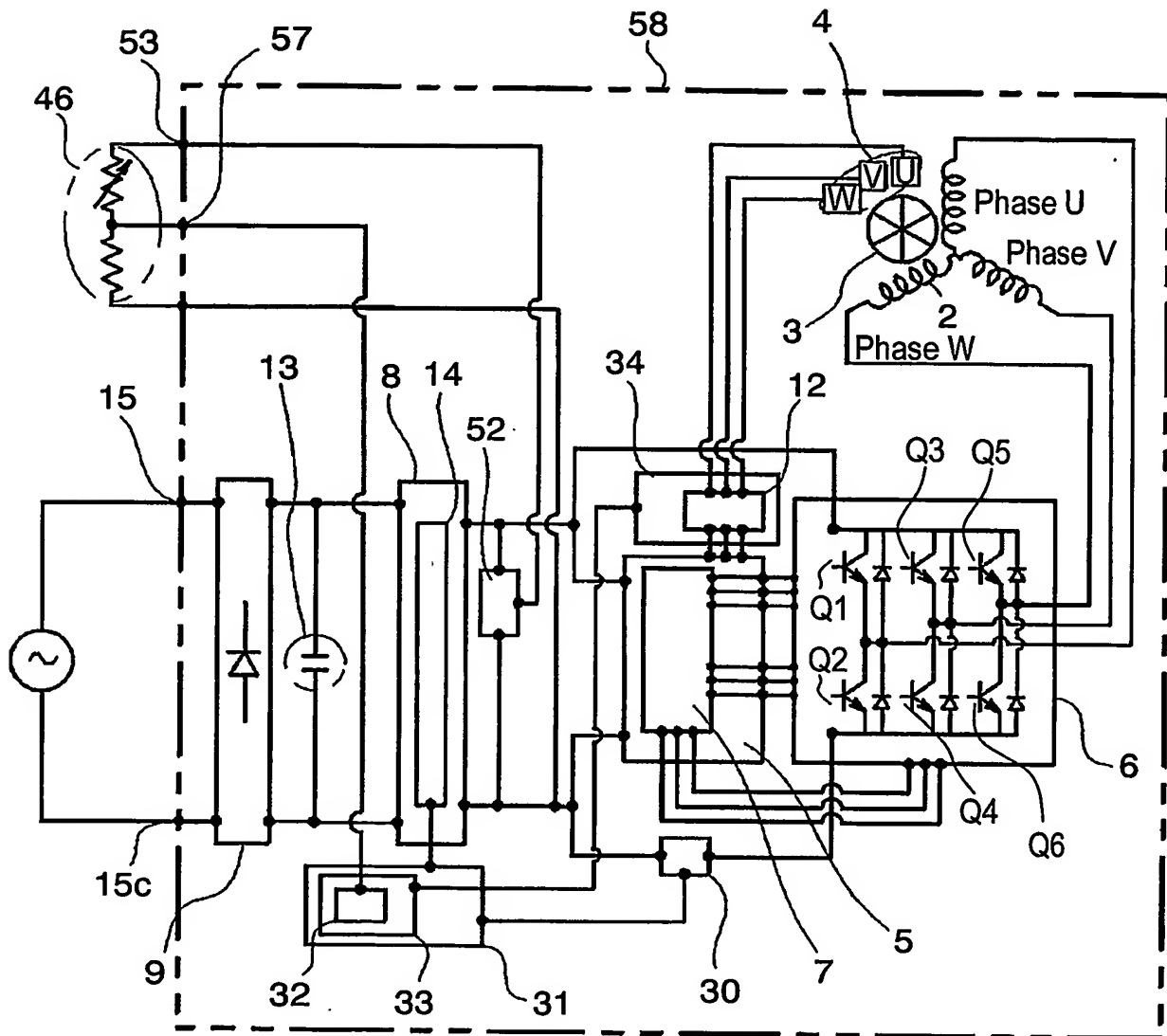
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FIG. 19



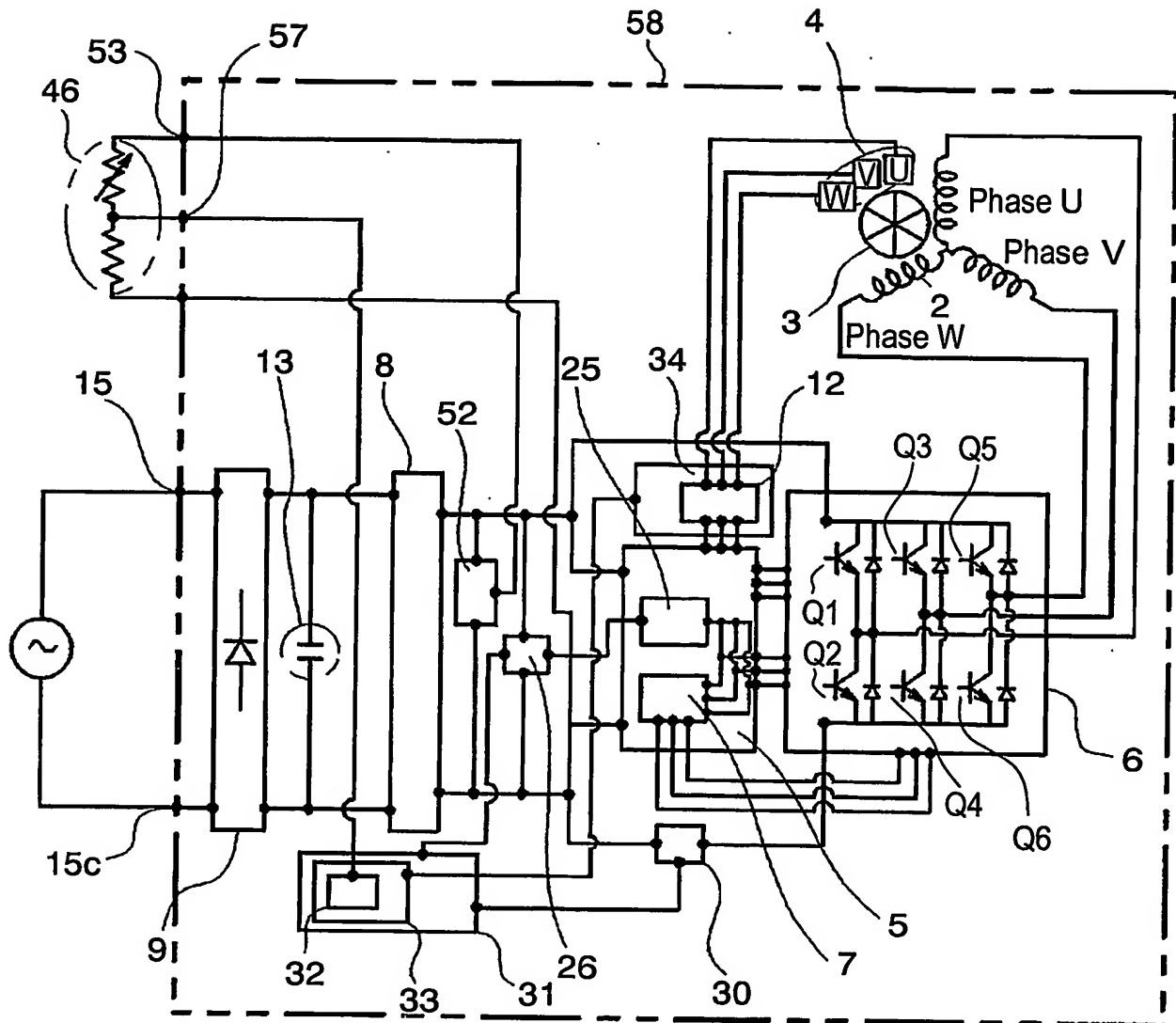
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FIG. 20



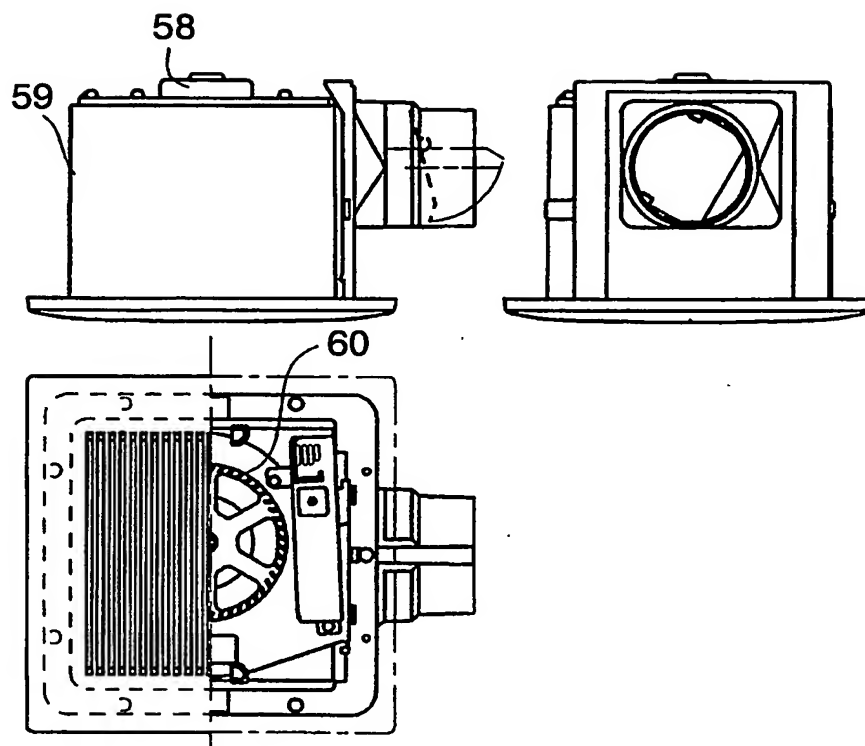
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FIG. 21



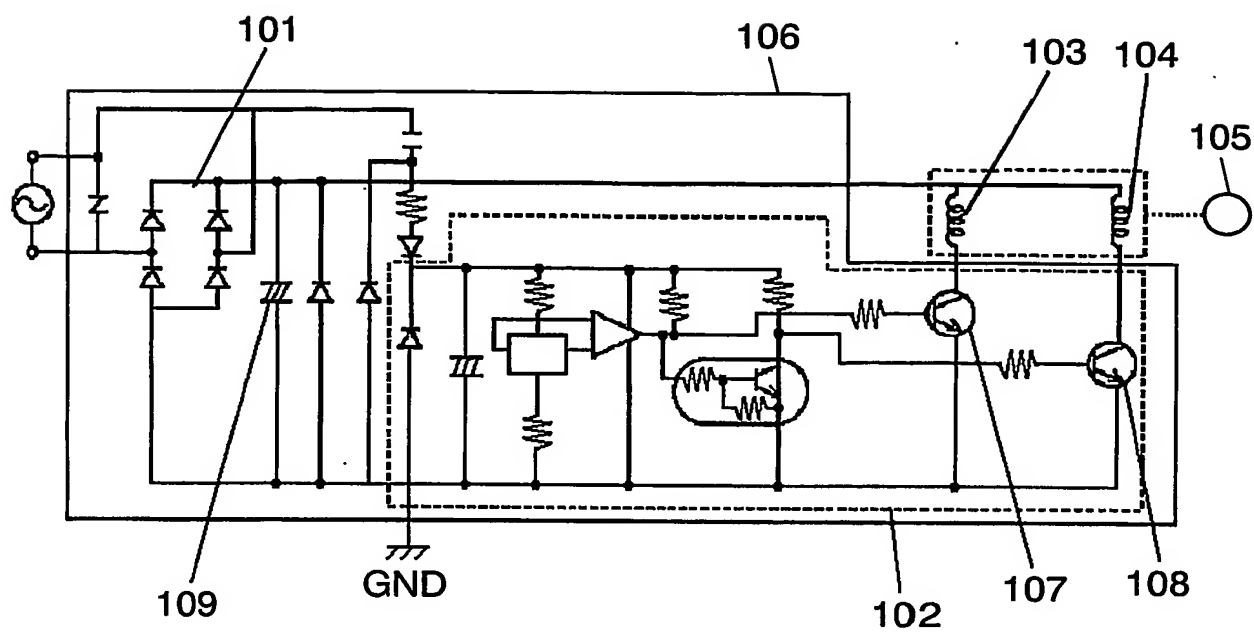
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FIG. 22



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FIG. 23



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## Reference numerals in the drawings

- 1 Brushless DC motor
- 2 Stator coil
- 3 Magnet rotor
- 3a Pole anisotropic magnet
- 4 Magnetic flux sensor
- 5 Controller
- 6 Inverter circuit
- 7 Current waveform controller
- 8 DC voltage converter
- 9 Rectifier
- 10 Stator
- 12 Magnetic flux density synthesizer
- 13 Smoothing capacitor
- 14 DC voltage changer
- 15 AC source coupler
- 15a Strong output terminal
- 15b Weak output terminal
- 16 Coupling sensor
- 24 Switch
- 25 PWM controller
- 26 Duty instructing means
- 30 Current sensor
- 31 Current controller
- 32 Set current changer
- 33 Current instructing means
- 34 Rotary signal output means
- 39 Rpm range sensor
- 40 Current instructing means
- Q1 – Q6 Switching element